

## Abstract

A scanning microscope includes at least one light source, an acousto-optical element, a beam deflection device and a beam guiding device. The at least one light source generates an illuminating light beam. The acousto-optical element spatially splits a sub-light beam from the illuminating light beam and adjusts an optical power of the illuminating light beam. The beam deflection device scans the illuminating light beam over or through a sample. The beam guiding device directs the sub-light beam onto the sample.